



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,262	01/11/2002	Jun Kamada	826.1783	6257
21171 7590 04/05/2007 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER AUGUSTIN, EVENS J	
			ART UNIT 3621	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/05/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/042,262	KAMADA ET AL.	
	Examiner	Art Unit	
	Evans Augustin	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgment

1. Receipt is acknowledged of a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e) and a submission, filed on 08 January 2007.
Claims 1-21 are pending.

Claim Rejections - 35 USC § 112

2. Claims 1-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
3. The purpose of the requirement that the specification describe the invention in such terms that one skilled in the art can make and use the claimed invention is to ensure that the invention is communicated to the interested public in a meaningful way. The information contained in the disclosure of an application must be sufficient to inform those skilled in the relevant art how to both make and use the claimed invention.
4. Any analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention. The standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of *Mineral Separation v. Hyde*, 242 U.S. 261, 270 (1916) which postured the question: is the

experimentation needed to practice the invention undue or unreasonable? That standard is still the one to be applied. In re Wands, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). Accordingly, even though the statute does not use the term “undue experimentation,” it has been interpreted to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without undue experimentation. In re Wands, 858 F.2d at 737, 8 USPQ2d at 1404 (Fed. Cir. 1988). See also United States v. Telectronics, Inc., 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988) (“The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.”).

5. As per claims 1-42, they recite the steps of collecting/analyzing data and predicting business events based on data collected/analyzed, but the specification fails to disclose the specific and necessary software codes or instructions combined with the hardware that would enable one of ordinary skills in the art to realize the invention without undue experimentation.
6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
7. Claims 1 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. As per claims 1 and 42, the applicant recites the term “auto discovery analysis”. The specification fails to clearly define to one of ordinary skills in the art the proper meaning of the term. The applicant must particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2-38 are also rejected as they depend on claim 1.
9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
10. Claims 39-41 and 43-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
11. As per claims 39 and 43, the claims refer to a computer system that depends on method. The applicant must particularly point out and distinctly claim the subject matter which applicant regards as the invention.
12. As per claims 40-41 and 44-45, the claims refer to a computer codes or instructions embodied on a computer signal and computer readable medium that depend on a method. The applicant must particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim Interpretation

13. In determining patentability of an invention over the prior art, the USPTO has considered all claimed limitations, and interpreted as broadly as their terms reasonably allow. Additionally,

all words in the claims have been considered in judging the patentability of the claims against the prior art.

14. It should also be noted that, in the office action that:

- A. Items in the rejection that are in quotation marks are claimed language/limitations
- B. Functional recitation(s) using the word “for” or other functional terms (*e.g.* “for monitoring operation of a self service terminal application exceeded by a self service terminal coupled to the computer” as recited in claim 8) have been considered but given less patentable weight¹ because they fail to add any steps and are thereby regarded as intended use language. To be especially clear, the Examiner has considered all claim limitations. However the A recitation of the intended use of the claimed invention must result in additional steps. See *Bristol-Myers Squibb Co. v. Ben Venue Laboratories, Inc.*, 246 F.3d 1368, 1375-76, 58 USPQ2d 1508, 1513 (Fed. Cir. 2001) (Where the language in a method claim states only a purpose and intended result, the expression does not result in a manipulative difference in the steps of the claim.).
- C. Word(s) that are separated by “/” are being examined as being synonymous or equivalent
- D. The USPTO interprets claim limitations that contain statement(s) such as “*if, may, might, can and could*”, as optional language. As matter of linguistic precision, optional claim elements do not narrow claim limitations, since they can always be

¹ See *e.g. In re Gulack*, 703 F.2d 1381, 217 USPQ 401, 404 (Fed. Cir. 1983)(stating that although all limitations must be considered, not all limitations are entitled to patentable weight).

omitted (*In re Johnston*, 77 USPQ2d 1788 (Fed. Circ. 2006)). They will be given less patentable weight, because language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.

- E. Independent claims are examined together, since they are not patentable distinct. If applicant expressly states on the record that two or more independent and distinct inventions are claimed in a single application, the Examiner may require the applicant to elect an invention to which the claims will be restricted.
- F. The aspect of "Task allocation" is being interpreted synonymously with memory management/allocation. Memory management is being interpreted in accordance with Computer Dictionary, 3rd Edition, Microsoft Press, Redmond, WA, 1997², ***Memory Management***: n. 1. In operating systems for personal computers, procedures for optimizing the use of RAM (random access memory). **These procedures include selectively storing data**, monitoring it carefully, and freeing memory when the data is no longer needed. Most current operating systems optimize RAM usage on their own; some older operating systems, such as early versions of MS-DOS, required the

² Based upon Applicants' disclosure, the art of record, and the knowledge of one of ordinary skill in this art as determined by the factors discussed in MPEP §2141.03 (where practical), the Examiner finds that the *Microsoft Press Computer Dictionary* is an appropriate technical dictionary known to be used by one of ordinary skill in this art. See *e.g. Altiris Inc. v. Symantec Corp.*, 318 F.3d 1363, 1373, 65 USPQ2d 1865, 1872 (Fed. Cir. 2003) where the Federal Circuit used the *Microsoft Press Computer Dictionary* (3d ed.) as "a technical dictionary" to define the term "flag." See also *In re Barr*, 444 F.2d 588, 170 USPQ 330 (CCPA 1971)(noting that its appropriate to use technical dictionaries in order to ascertain the meaning of a term of art) and MPEP §2173.05(a) titled 'New Terminology.'

- use of third-party utilities to optimize RAM usage and necessitated that the user be more knowledgeable about how the operating system and applications used memory. See also memory management unit, RAM. 2. In programming, the process of ensuring that a program releases each chunk of memory when it is no longer needed. In some languages, such as C and C++, the programmer must keep track of memory usage by the program. Java, a newer language, automatically frees any chunk of memory that is not in use. See also C++, C, garbage collection, Java.
- G. For prior art purposes, the United States Patent and Trademark Office (USPTO) is analyzing the claimed invention as a content/software/program/code distribution system between a content/software/program/code owner, a distributor or store and end users. The distributor pays a fee for the content/software/program/code that gets distributed to an end user with a multiprocessor machine. The invention describes the architecture of the multiprocessor system vis a vis the content/software/program/code. The invention describes the aspects of the encryption and verification (respectively) of the content/software/program/code within the user multiprocessor system.
- H. During the reply filed on 08 January 2007, applicant admitted that task allocation necessarily has the aspect discriminating (inherent) -**“the specification clearly states that the secure task management and the secure memory management allocate secure tasks and unsecured tasks. Therefore, the encrypted codes of the secure tasks are stored in the secure memory, and the codes of the unsecured tasks are stored in the normal memory. As allocation necessarily involves discriminating (otherwise, a determination cannot be made as to what tasks should be allocated**

to what memory), Applicants respectfully submit that the claim term **discriminating is fully supported by the specification**". Therefore, "allocating" and "discriminating" will be used interchangeably.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States. . . .

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Ginter et al. (U.S. 6427140).
2. As per claims 1-21, Ginter et al. discloses a invention that relates to computer-based and other electronic appliance-based technologies that help to ensure that information is accessed and/or otherwise used only in authorized ways, and maintains the integrity, availability, and/or confidentiality of such information and processes related to such use computer system that relates to development architecture frameworks, and more particularly to managing an environment of a development framework. The invention comprises of the following:

- A. An environment for electronic information owners, distributors, and users; financial clearinghouses; and usage information analyzers and resellers (column 3, lines 45-48)
- B. Multiprocessing system with multiprocessors (column 73, lines 38-40), in which content/software/program/code is encrypted through the components of the multiprocessor system (column 72, lines 31-67, column 73, lines 24-33)
- C. Ginter et al. teaches Memory Management Unit that provides hardware support for memory management and virtual memory management functions. It may also provide heightened security by enforcing hardware compartmentalization/allocation of the secure execution space (e.g., to prevent a less trusted task from modifying a more trusted task) (col. 69, lines 10-15). Basically, Ginter et al. compartmentalizes/separates the execution of secured/trusted/encrypted from the less trusted/unsecured/unencrypted/normal tasks. Additionally, Ginter et al. teach the aspect of allocating task or task manager (column 83, line 36, column 88, lines 51-67). The prior art by Ginter et al. has self-contained computing and processing environments that may include their own operating system kernel including code and data processing resources (column 79, lines 34-37). A kernel manages the basic hardware resources of electronic appliance, and controls the basic tasking provided by the operating system (col. 88, lines 51-53). It also manages allocation, deallocation, sharing and/or use of memory (col. 88, lines 63-65). The environment can recognize (differentiate or discriminate), process and store secure and non-secure data (col. 80, lines 20-67) (**“a secure memory storing an encrypted code of a secure task and verifying information for verification of validity of the encrypted code”**) (**“a secure processor executing the encrypted code when the validity of the encrypted code is verified according to the**

verifying information”) (“a normal memory storing a code of a normal task; a normal processor executing the code of the normal task”)

- D. The Examiner takes official notice that the aspect of using a normal memory for normal tasks and a secure memory for secure tasks (memory allocation) is common knowledge in the art (See US 5734822, col. 15, lines 15-25 -- US 6081876 col. 2, lines 8-15 --US 651162, col. 10, lines 53-67, col. 11, lines 1-8) **(“a secure processor executing the encrypted code when the validity of the encrypted code is verified according to the verifying information”) (“a normal memory storing a code of a normal task; a normal processor executing the code of the normal task”)**
- E. Memories stores encrypted and unprotected content (column 21, lines 22-37)
- F. Content/software/program/code being stored in units of physical allocation memory (bytes) (column 68, line 51) and verified through the components of the multiprocessor system (column 125, lines 60-67) **(“secure memory stores the encrypted code in units of physical memory allocation, stores the verifying information for the encrypted code in the units, and verifies the encrypted code in the units according to the verifying information, and the secure processor fetches, decrypts, and executes an encrypted instruction included in an encrypted code whose validity has been verified”)**
- G. The system also uses digital signature to authenticate the communication of content (column 22, lines 5-10)
- H. Employing a plurality of encryption keys (column 21, lines 65-67, column 22, lines 1-10, column 49, lines 1-59), in an non-volatile memory (column 49, lines 9-12) **(“a plurality of**

decryption keys, and decrypts the encrypted instruction using a specified decryption key in the plurality of decryption keys”)

- I. The aspects of using session keys (column 220, lines 20-21) (**“secure memory and said secure processor share a session key after mutual authentication”**)
- J. System uses secure hardware (including drives) with a secure/trusted architecture (column 13, lines 5-25) (**“a secure drive further encrypting the encrypted code using a unique key, and storing the encrypted code, wherein said secure drive and said secure memory share a session key after mutual authentication, said secure drive decrypts the encrypted code using the unique key at a read instruction from said controller, encrypts the code using the session key, and transfers the code to said secure memory”**)
- K. The storing of secure and non-secure information can be stored in a single memory chip or overlapping each other (par. 63, lines 40-43) (**“at least parts of said secure memory and said normal memory overlap each other”**)
- L. The system uses a memory management unit to manage the execution space (column 69, lines 9-42) (**“secure processor fixes at least a part of a logical circuit for executing an encrypted code in a circuit state in a non-volatile manner using the encrypted code.”**)
- M. System teaches Electrically Erasable Programmable Read Only (EEPROM) (column 70, lines 66-67, column 71, lines 1-5) (**“said secure processor erases a previous circuit state of the logical circuit, and newly overwrites the state.”**)
- N. Circuitry designed to "zeroize" memory may be included as an aspect of self-destruct processes (column 64, lines 30-31)

Conclusion

16. *Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that if the applicant is preparing to respond, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner.*
17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evens Augustin whose telephone number is 571-272-6860. The examiner can normally be reached on Monday thru Friday 8 to 5 pm.
18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Fischer can be reached on 571-272-6779.



Evens J. Augustin
March 30, 2007
Art Unit 3621



ANDREW J. FISCHER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600